249
[655] tree is needed to reinvigorate them In the time of the Coorg Rajas, cardamoms were a Government monopoly. Now the jungles are held from the State on a lease of ten years.

Coffee Cultivation

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[177] The cultivation of coffee is another great industry in Coorg. It was first introduced by the Moplas, and the Coorgs borrowed it fron them. It became a popular industry which effected great changes in their economic life. But the depression which has since followed led to the abandonment of many estates and to renewed interest in rice cultivation.

Fruit Cultivation

Of fruit trees, plantains and oranges are common all over Coorg. Coorg oranges are famous. The best variety is the luscious loose jacket, so called because the rind of the ripe fruit is almost detached from the pulp. Pineapples, pomegrantes, and jack fruit are abundant.

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Honey and Wax

Honey and wax are of great importance to the Coorgs. The latter is one of their articles for sale and export. The native bees are rather small, dark brown or black. Most swarms live in hollow trees or among rocks. But tht Coorgs make hives, put them near the old swarms and wash them inside with honey in the hope that new swarms will settle in them. Such swarms belong to the maker of the hive, while other swarms belong to the finder. The hives are made in hollowed logs loosely fitting in set ends. They are usually three to five feet long and about one foot in diameter. They are laid horizontally in the forks of trees often as much as 20 feet from the ground. This is to protect the swarm from animals. To obtain the honey and wax, the swarm is first stupefied with smoke from torches. The end of the comb is then fried out and all the comb is then removed at once destroying the colony. A large wooden bowl of special type is used for collecting the honey. Another method of gathering honey is to take a number of pots with small holes, the inside of which are either washed with honey or rubbed with beeswax. These pots are placed in the forest at a distance from their homes. Bees are gathered and form a colony in each pot. The inmates of the house go there at night. cover them with a kerchief, bring them home, and place them conveniently on a plank five feet from the floor, and allow them to remain until the comb is developed. When honey is finally gathered by pressing, it is strained through cloth, and preserved in vessels before being used. After the honey is pressed out, the residue is boiled and strained to collect wax which is poured in shallow vessels where it becomes solidified. It is then sent to the market for sale.

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4: Richter M, G-5 (ca. 1856-1870) 1870 AW5 Coorg AW5

of a crocodile. Under the knotty swellings of the bark of the Matti tree small quantities of water are hidden, which the lynx-eyed Kuruba readily discovers in his jungle-wanderings during the hot season and from which providential fountains he draws a thirst-quenching draft. ⅞ The *Hony* or Kino tree (Pterocarpus marsupium) yields an excellent yellowish timber fit for exposure and a valuable brownish gum, the kino, which oozes out from the wounded stem. Chunam brought in contact with it turns bright yellow. 137 313 [312]

Teak or Tectonia grandis occupies a distinct girdle along the eastern boundary of Coorg, within the basin of the Lakshmanatirtha and in Nanjarájpatna and Yélusávirashíme taluq; but, with the exception of the Amali-topu in Kiggatnád, the teak forests in Coorg are neither so dense, nor so stately as those in Burmah, where trees of enormous size and height are found. The large and strongly nerved leaves, rough above, whitish and downy beneath, and the numerous white flowers in terminal branches on the high and many branched trunk, mark the beauty and strength of the tree. Both for house and ship building teak is the best of woods, easily worked and almost indestructible by climate or insects owing to its oily nature. Coorg teak is of most excellent quality, oily and free of heart-shake. It is a Government monopoly and sold from wood-yards at the rate of 12 Annas per cubic foot. [655]

In close proximity to teak and in an equally limited tract of dry and elevated slopes grows the *White Sandal-wood*, (Santalum album) scattered between other trees and on cultivated land. It is rather a small tree of a more or less crooked stem, but its spreading branches with tiny, light-green leaves and yellow or purple coloured small flowers give it an elegant appearance and a marked feature in the landscape. The wood is close-grained and hard, especially the duramen or heart-wood, which for these qualities and for its agreeable scent is highly prized and employed for ornamental boxes, [322]

⅞ [Errata: This should read "draught;" See Corrigenda Sheet, Cat. 116, p. 473 — Ed/RST]

4: Richter M, G-5 (ca. 1856-1870) 1870 AW5 Coorg AW5

137 card cases, paper cutters, fans, walking sticks, etc. which are
313 made chiefly in Nuggur and North Canara. Sandal-wood is
[322] also a Government monopoly and is collected at an expense
[655] of one eighth of the value of the wood, trees when from 16
to 40 years old according to the nature of the soil, where
grown, are cut down; the best yield a billet of 5 inches square
[652] and 4 or 5 feet long. The wood fetches at the public auctions
[437] periodically held by Government at the cotics or wood stores,
[439] from 70 to 98 Rupees per candy of 550 avoirdupois, and is
generally exported to Bombay. Natives distinguish 3 kinds
according to colour: the "red sandal" (sriganda) which is the
most highly scented, the "yellow sandal" (arasana ganda), and
the "white sandal" (bili ganda) which possesses but a faint
314 aroma and is least prized. The chips are burnt as perfume,
[302] or reduced to powder which enters into the composition for
marking the foreheads of natives. The roots, containing the
[303] greatest amount of the essential oil, are chiefly used for its
production. It is heavier than water and yields an excellent
245 perfume. The sandal tree is propagated from seed and suc-
kers, springing up from the roots.

137 A stately though not very valuable tree all over these
313 parts of the country is the *Wild Mango tree*, which towers with
its lofty crown far above its humbler neighbours. But the
giant of these jungles is the *Ajini* or *Wild Jack tree* (Arto-
carpus hirsuta), the timber of which is most useful for house
and ship building. The rosy-tinted, smooth-barked *Ben-teak*
or Nandi (Lagerstroemia parviflora) is reputed for its excel-
lent timber.

137 A splendid jungle tree, when in flower in February and
314 March, is the *Red Cotton tree* or Bombax Malabaricum a very
large specimen, stands in front of the Anandapur Mission
Church. Its flowers are large and of a deep red colour, and
the many seeded capsules contain a silky cotton, which is
employed for stuffing pillows and mattresses. The staple is

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137 Fraserpet to which the elegant lines of Southey so truly apply:—

"It was a goodly sight to see
That venerable tree.
For over the lawn irregularly spread,
Fifty straight columns propt its lofty head;
And many a long depending shoot,
Seeking to strike its root,
Straight like a plummet, grew towards the ground,
Some on the lower boughs, which crost their way,
Fixing their bearded fibres, round and round,
Some to the passing wind at times, with sway
Of gentle motion swang.
Others of younger growth, unmoved, were hung
Like stone drops from the cavern's fretted height.
Beneath was smooth and fair to sight,
Nor weeds nor briars deformed the natural floor
And through the leaf-cope which bower'd it over
Came gleams of checkered light.
So like a temple did it seem, that there
A pious heart's first impulse would be prayer."

(*The Curse of Kehama, Book* 13.)

The *Pippal* (Ficus religiosa) is likewise a large tree and found nearly in every temple in Coorg, but growing best in the drier districts. This tree proves most destructive to neglected buildings; when once rooted in crevices, nothing can withstand its progress. More common than both preceding trees [262] is the *Atti-mara* or "Ficus glomerata" with fruit much like the common fig and which is eaten by the natives. The *Indian Caoutchouc tree* "Ficus elastica" also occurs and is [314] not only a useful but highly ornamental tree. The milky juice obtained from incisions into the bark is exposed to the air, when the *Caoutchouc* or elastic substance spontaneously separates, leaving a foetid whey-coloured liquid.

[655] Almost a stranger to Coorg and growing only in several places along the Kávéri between Fraserpet and Sómawarpet,

4: Richter M, G-5 (ca. 1856-1870) 1870 AW5 Coorg AW5

is the *Tamaind*[2] *tree* (Tamarindus Indica) which Government has reserved and partly made over without tax to certain Brahmins in Ramaswámy Kanawé, partly formed out on yearly rent. It is a stately tree and yields a dense shade, under which however, many plants do not grow and natives do not like to sleep. 137 [655] [513]

It would lead me too far to enter upon a description of the many shrubs, herbs and grasses of these jungles. Suffice it to say, that there are many and very beautiful ones, but most of them are annually swept away by the periodical fires, the purifying messengers of nature, that run through every jungle from February to April. These fires once established in the high coarse hill-grass rush madly in their onward career to the very tops of the mountains, and beautiful is the sight at night of these distant serpentine lines of flame extending over whole ranges of hills.

Coorg is rich in ferns and as these elegant plants will always attract the lover of nature, it may perhaps prove acceptable, if I append a list of such, as have been collected about Mercara and identified according to Major Beddon's work on Ferns by an enthusiastic admirer of these humble productions of nature:— [127]

Alphabetical list of Coorg ferns.

Names.	Where to be found.
Acrophorus immersus	On trees and at the foot of trees, near Ball-practice ground, Falls, etc. common.
Acrophorus pulcher	On trees and rocks; near Ball-practice ground; abundant almost anywhere.
Adiantum capillus veneris	In a wall close to the Fort.
Do. caudatum	Near Ramaswámy Kanawé.
Do. hispidulum	Near Ball-practice ground, 3rd milestone, Santi-coppain Road.

[2] [Errata: This should read "Tamarind", see Corrigenda sheet, Cat. 116, P. 473 -- Analyst]

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while thus engaged, the Kurubas have a peculiar song, made for the occasion and expressing their feigned sympathy with the spoliated bees, so rudely disturbed of their nightly rest. The Kurubas sell the honey at 2¼ seers for the rupee. The wax has to be delivered for a pittance to the contractor of jungle produce, who as Government agent is alone entitled to sell it at the rate of 2¼ annas per seer of 24 rupees weight.

Wasp and Hornet-nests, suspended from trees like inverted cabbage-heads, are frequently met with in jungles and are better left alone, for their inmates attack any intruder with painful stings. Small and large Ants of a black and red colour are very numerous and maintain the ferocious character of the family, pursuing the disturber of the domicile of their bustling community and inflicting severe bites upon the unfortunate victim. They play an important part in the cleansing and purifying department of the economy of nature. Their structures, domestic economy and transport operations of objects many times larger than their own bodies, excite admiration.

Of the numerous and most beautiful family of *Lepidoptera* or *Butterflies* and *Moths* Coorg presents a goodly show, but though fine collections of them have been made, their classification is still uncompleted. With the close of the monsoon the Lantana hedges and especially the sandy banks of streams seem to be the rendezvous of a great variety of butterflies, of which some are distinguished for their size and brilliant colouring. Three species of similar size and shape chiefly attract our attention: the . . . . . with black velvety upper wings of about 6 inches in width and light blue under wings; the . . . . . with similar upper wings and the swallow tailed lower wings ornamented with a pale yellow satin-like spot; the most beautiful, however, is the . . . . . the black upper and lower wings of which are dotted all over

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natives; but the handlabour of two coolies for turning it appears to them too severe and impracticable for large quantities of paddy. A winnowing machine would find greater favour. 243 [179]

The cultivation of Cardamom is to a great number of Coorgs next in importance to that of rice, and the possession of a fine cardamom jungle is regarded as a mine of wealth. In the time of the Coorg Rajahs and for some time after, cardamoms were a Government monopoly, and the cultivators had to sell their produce at a fixed rate to the Sircar, receiving from 12 to 20 rupees per maund of 40 seers dry capsules. Now the jungles are held from the state on a lease of 10 years, at 3 lacs of rupees, but this revenue to Government has not yet reached the amount, cleared by the Rajahs which, owing to their monopoly of selling the spice, rose as high as 80,000 rupees per annum! Any jungles that are not disposed of at the lease-auction, are worked by the ryots for Government. 249 [556] [655]

The Cardamom plant (Elettaria cardamomum *Kg.* yélaki) grows spontaneously in the evergreen forests or Malés along the Ghat-line and its spurs at an elevation of from 3,000 to 5,000 feet. Still, nature requires a certain stimulus to produce the plant in greater abundance and this is effected by a singular process, but though perfectly empirical on the part of the natives, no doubt it is based on a natural law which holds good in many other instances, where seed is kept in the ground in a state of vitality for a long period, till such a change in the climatic condition is brought about, as will favour its germination and subsequent growth. Of many other instances besides the cardamom, I need only mention: the Mexican thistle (Argemone Mexicana), the white weed (Ageratum cordifolium) and the charcoal tree (Sponia Wightii), all of which spring up spontaneously on newly cleared or broken, but favourable soil.

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b. *Forest Conservancy.*

A glance at the Coorg Forests and their general Flora, as stated in page 16 ff., will show, that the formation of a Forest Conservancy Department in 1864 was an absolute necessity, and it is only to be regretted, that it was not five years earlier in operation, before some of the finest forests fell under the Planters' axe. There is, however, still scope enough for the energy and talents of a well trained Forest Officer in Coorg, and the more a scientific system of working the reserved forests is introduced such as was originated by Dr. Brandis and carried out in Burmah and other parts if India,[1] especially in the Madras Presidency under the able direction of Dr. Cleghorn and Major Beddome, the better will be the prospects of an ever increasing revenue from this department, which seems not yet to be in a very flourishing condition. Being left without rules fixed by law, the Forest Officer cannot act with that authority which is due to his position and necessary to the interests of Government.

Of the trees reserved by Government, Sandal and Teak are its monopoly, the Kuve or Poonspar is sold at the rate of Rs. 20 per tree, Blackwood and Anjili are sold at Rs. 10 and Ebony, Hone and Irupu at Rs. 6 per tree. All other timbers, bamboos and firewood are allowed free to the ryot paying land revenue to Government and also to all Government servants in Coorg whose pay does not exceed 10 Rs. per mensem, without written permission or any prohibition whatever, except that only mature trees must be cut and that the timber must be used solely for bona fide agricultural and building purposes and not for sale. For the same kind of trees which are free of charge to the ryots, traders have to pay from Rs. 3 to Rs. 4—8 per tree and Rs. 6 per 1000 bamboos, whilst non-ryot residents, if for their own use, pay only half price.

[1] [Errata: This should read "of India": see Corrigenda, Cat. 116, P. 494 — Analyst]

4: Richter M, G-5 (ca. 1856-1870) 1870 AW5 Coorg AW5

655 654 185 The Assistant Conservator in charge of the department is under the general control of the Superintendent of Coorg and in fact his Revenue Forest Officer, but departmentally he is a third Assistant to the Conservator of Forests in Mysore. His functions hitherto have been the inspection of and report on those forests which were applied for by coffee planters, the inspection and working of reserved forests, the cultivation of tree-nurseries and the superintendence of the collection and sale of sandalwood and forest produce, the latter comprising resin, pepper, tamarind, soapnut, gallnut, bees' wax and areca nut. The forest receipts in 1869-70 amounted to Rs. 92,668—1—6 and are thus accounted for:

[651]

1. Timber . . .	Rs.	13,645—15—11.
2. Sandalwood . .	„	45,027—14— 3.
3. Forest produce .	„	1,198— 1— 2.
4. Cardamoms . .	„	32,796— 2— 2.
		92,668— 1— 6.

c. *Revenue Survey.*

654 648 In the time of Lingarája, from October 1815 to October 1817, a topographical survey of Coorg, which then also comprised the two taluqs Puttúr and Sulya, was completed by Lieut. Connor at the request of the Rájah. To judge from the "Memoir of the Codugu Survey," written by him, and his beautifully executed map on a scale of one mile to an inch, 1/1 Lieut. Connor's task, accomplished in so short a time, is a giant's work and a lasting memorial of his energy and high professional skill. On an area of 2,165 square miles, then far more densely wooded than at the present time, he made no less than 118 triangulations, ascertained and measured 732 boundary stations and took the bearing and distance of 454 villages from fixed trigonometrical points; and on his map, every plot of cultivated land was carefully laid down.

1/1 [Errata; This should read "one inch to a mile" See corrigenda, Cat. 116, P. 979 - Arm/ST]

4: Richter M, G-5 (ca. 1856-1870) 1870 AW5 Coorg AW5

his estate has been fixed by Government at the rate of three annas per acre.

d. Abkári.

Abkári, or the revenue derived from the manufacture or sale of intoxicating liquors and drugs, has, in spite of the best intentioned repressive measures of Government, proved a very expansive financial source, showing an increase of revenue since 1834, which indicates a most lamentable rate of consumption of spirituous liquors in so small a country:

Abkári revenue.

In 1834-35	Rs. 4,445.	In 1854-55	Rs. 20,022.
„ 1839-40	„ 17,409.	„ 1858-59	„ 32,266.
„ 1844-45	„ 15,646.	„ 1864-65	„ 140,491.
„ 1849-50	„ 25,983.	„ 1869-70	„ 75,146.

A Government Distillery having been erected at Fraserpet and rented to licensed contractors who within its walls manufacture arrack of a certain strength and pay for the monopoly a still-head-duty; it is assumed, that no other native liquor is produced in the country; but there can be no doubt, that many ryots distil a superior article from rice for feasts and home-consumption in general; this practice is, of course, interdicted and punishable, but who dares to denounce trespassers!

In the Rájahs' times a few people only knew the secret of distilling rice-brandy, and drinking was kept down by rules enforced in Coorg fashion, besides, it was dangerous in those days to get drunk; for if, according to the ancient adage "In vino veritas," there is truth in a bottle of wine, there must be a great deal of it in a bottle of brandy! Words spoken in an unguarded moment, if conveyed to head-quarters by one of the numerous channels of espionage, might cost the man his tongue, nose or head. There is no such fear now before the

4: Richter M, G-5 (ca. 1856-1870) 1870 AWS Coorg AWS

eyes of the Coorg inhabitants. They are prosperous, their climate favours the evil habit and drunkenness, in its very nature, is a growing vice. Moreover since the influx of so many European settlers in Coorg, the natives have become familiar with the strongest European drinks and the liquor dealers are not slow in improving their opportunities to the ruin of the people. Beer- wine- and brandy-shops are scattered over the country.

It is hard to say how Government ought to deal with this vital Abkári-question and what measures might be adopted, to stem the torrent of vice and ruin. The old barriers, raised against the moral and physical plague of drunkenness by the laws of Hindu religion and of caste, have been broken through and cannot be repaired. The system of Government monopoly appears at first sight most objectionable; yet the abolition of it would have consequences still more deplorable. There is one panacea and one only, against this, as against every other moral evil in individuals or nations—a renovation of moral life and strength through the Gospel. All else is quackery!

4. THE DEPARTMENT OF PUBLIC WORKS.

It was not until the year 1862, that the wants of Coorg were sufficiently recognised, to induce Government to organize a regular establishment for the execution of Public Works in Coorg. A detachment of Sappers and Miners having been stationed in the Province since 1834, all the needful Public Works were carried out by them and after they had been withdrawn, an European Overseer took charge of the roads etc. The present effective establishment with an Executive Engineer (R. E.) at its head wants only funds to carry out large and important works, especially an iron bridge over the Kávéri with new highroads through Southeast Coorg into Mysore and Wynád.

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5. POST OFFICE AND TELEGRAPHS.

Besides the regular postal service with Offices at Mercara and Vírájpet, there is a local post called Anché, originally established by the Rájahs and still principally used for official communication between the district functionaries and the heads of departments, who are exempt from postage, but it is open also to the public both for letters and packages on the same terms as the Queen's Post. By its means 160,999 letters, etc. have been despatched in 1869-70, whilst the Queen's Post at the two offices transmitted 147,309 letters, etc. over the three lines, Mercara—Mysore,—Cannanore,—Mangalore. For the Anché-tappál there are five lines:

1.	from Mercara to	Fraserpet	20	miles.
2.	" "	Kiggatnád	35	"
3.	" "	Kodlipet	46	"
4.	" "	Nálkanád	20	"
5.	" "	Madyanád	5	"

In localities away from these lines postal communication is very imperfect and public business much impeded and often seriously inconvenienced.

Mercara has lately become the Head-quarters of the Malabar Coast Division of the *Government Telegraph Department* and consequently the Bangalore, Cannanore, and Mangalore lines are here united and Mercara is brought into telegraphic communication with all parts of the civilized world. During 1869-70 1595 messages have been received and despatched, and yielded an income of Rs. 1,798—8.

6. MILITARY DEPARTMENT.

Considering the military services rendered by the Jammaryots in the times of the Coorg Rájahs and their martial spirit and loyalty, so often applauded by the English Government,